### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



#### (43) International Publication Date 11 August 2005 (11.08.2005)

#### PCT

## (10) International Publication Number WO 2005/074252 A1

- (51) International Patent Classification7: H04N 5/00, 7/24
- (21) International Application Number:

PCT/IB2005/050345

- (22) International Filing Date: 27 January 2005 (27.01.2005)
- (25) Filing Language:

English

(26) Publication Language:

English

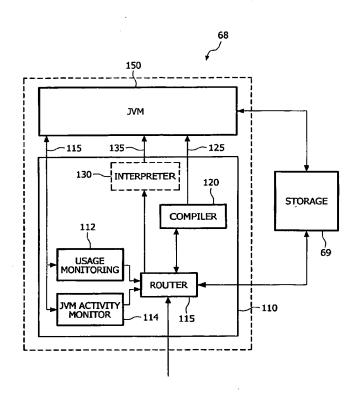
- (30) Priority Data: 0401781.0 28 January 2004 (28.01.2004) GB
- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BENJES, Immo [DE/GB]; Philips Intellectual Property, & Standards, Cross Oak Lane, Redhill Surrey RH1 5HA (GB). FOSTER,

Jonathan, G. [GB/GB]; Philips Intellectual Property, & Standards, Cross Oak Lane, Redhill Surrey RH1 5HA (GB). HOULDSWORTH, Richard, J. [GB/GB]; Philips Intellectual Property, & Standards, Cross Oak Lane, Redhill Surrey RH1 5HA (GB).

- (74) Agents: WILLIAMSON, Paul, L. et al.; Philips Intellectual Property, & Standards, Cross Oak Lane, Redhill Surrey RH1 5HA (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

[Continued on next page]

(54) Title: DIGITAL BROADCASTING TERMINAL



(57) Abstract: A terminal (60) in a digital broadcasting system supports a virtual machine (150), such as a Java<sup>TM</sup> virtual machine, which processes applications in a first code format, such as Java<sup>TM</sup> byte code. A plug-in (110) is provided which converts applications that are received in a second code format into the first code format. plug-in (110) can compile (120) the application into the first code The application can be format. compiled (120) upon receipt, or it may be stored (69) and compiled at a later time, such as overnight or when the virtual machine (150) has spare processing capacity (114). Applications can be converted based on monitored usage statistics (112).



(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

#### Published:

with international search report